

Appln. No.: 09/455,805
Appeal Brief dated May 17, 2004



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Susan D. Woolf et al.

Serial No.: 09/455,805

Filed: December 7, 1999

For: SYSTEM AND METHOD FOR
ANNOTATING AN ELECTRONIC
DOCUMENT INDEPENDENTLY OF
ITS CONTENT

Atty. Docket No.: 003797.78802

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Sir:

This is an Appeal Brief in accordance with 37 C.F.R. § 1.192, filed in triplicate in support of Appellant's March 16, 2004 Notice of Appeal. Appeal is taken from the Final Office Action mailed September 16, 2003, and the Advisory Action mailed February 24, 2004. Please charge any necessary fees in connection with this Appeal Brief to our Deposit Account No. 19-0733.

I. REAL PARTY IN INTEREST

The owner of this application, and the real party in interest, is Microsoft Corporation.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

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III. STATUS OF CLAIMS

Claims 1-29 are rejected. All of the pending claims, claims 1-29, are shown in the attached appendix.

Claims 1-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,146,552 to Cassorla et al. ("Cassorla") in view of Applicant Admitted Prior Art ("APA").

Appellants hereby appeal the rejections of claims 1-29.

IV. STATUS OF AMENDMENTS

On February 12, 2004, Appellants filed a Response and Amendment after the Final Office Action of September 16, 2003. An Advisory Action mailed February 24, 2004 indicated that the proposed amendments were not entered. Consequently, claims 1-29 remain pending without further amendment.

V. SUMMARY OF INVENTION

In making reference herein to various portions of the specification and drawings in order to explain the claimed invention (as required by 37 C.F.R. § 1.192(c)(5)), Appellants do not intend to limit the claims; all references to the specification and drawings are illustrative unless otherwise explicitly stated.

The invention is directed to a method and apparatus for allowing a user to add annotations and other markings to an electronic document independently of the content of the

document. *Specification*, p. 1, ll. 8-10. According to one embodiment, a tablet and stylus-based computer may be programmed with a document browser that permits a user to annotate documents that are viewed through the browser. The annotations are stored separately from the viewed document pages but are correlated with the pages such that when a previously annotated page is revisited, annotations relating to that page are retrieved and displayed on top of the page as an ink layer. *Specification*, p. 2, ll. 16-20. A user can mark opaque annotations on a computer display, which appear to be written on the page itself. *Specification*, p. 6, ll. 11-12. In another embodiment, the ink layer may be superimposed over and blended with pixels on the document page. *Specification*, p. 6, ll. 16-17. Each opaque annotation pixel replaces a corresponding pixel on a document page, whereas each translucent annotation pixel (e.g., highlighting) is blended with a corresponding pixel value on a document page to produce a different color from that in the original document. *Specification*, p. 8, ll. 22-25.

According to the invention, annotations can be saved as “strokes” in a data structure and stored locally in a file associated with a currently displayed page of a document. Each stroke can comprise a stroke type (e.g., annotate, highlight or erase), a stroke width, and a stroke color in addition to coordinates indicating the stroke trajectory. In various embodiments, annotation storage occurs automatically, such that whenever an input device is released (or lifted), a new stroke is automatically stored. *Specification*, p. 8, l. 27 to p. 9, l. 2. Annotations can be stored as a bitmap image, or combinations of data structures and bitmap images may be used. *Specification*, p. 9, ll. 3-7.

According to the invention, an annotation mode selection menu permits a user to select from a plurality of annotation modes for a displayed document. These modes include a "selection" mode, an "ink" mode, a "highlight" mode, and an "erase" mode. "Selection" mode permits the user to switch to normal browser functions. "Ink" mode allows a user to annotate a portion of a document with an opaque ink color. "Highlight" mode permits a user to annotate a portion of a document with a translucent color. "Erase" mode permits a user to erase previous annotations. *Specification*, p. 7, l. 10 to p. 8, l. 7. Figure 4 illustrates an example of the annotation mode selection menu. Figures 5-7 illustrate operation of the "ink" mode, "highlight" mode, and "erase" mode.

VI. ISSUES

- 1) Whether claims 1-29 are patentable under 35 U.S.C. § 103(a) over *Cassorla* in view of *APA*.

VII. GROUPING OF CLAIMS

In accordance with 37 C.F.R. § 1.192(c)(7), Appellants respectfully assert that the claims do not stand or fall together. Thus, the following groups of separately patentable claims should be recognized:

GROUP I -- Claims 1, 6, 10, 14, and 16.

GROUP II -- Dependent claims 2, 11, and 17.

GROUP III -- Dependent claims 3 and 12.

GROUP IV -- Dependent claims 4 and 18.

GROUP V -- Dependent claims 5, 13 and 19.

GROUP VI -- Dependent claim 7.

GROUP VII -- Dependent claims 8 and 20.

GROUP VIII -- Dependent claims 9 and 15.

GROUP IX -- Dependent claims 21, 25, and 27.

GROUP X -- Dependent claim 22.

GROUP XI -- Dependent claims 23, 26, and 28.

GROUP XII -- Dependent claim 24.

GROUP XIII -- Independent claim 29.

In accordance with 37 C.F.R. § 1.192(c)(7) - (8), separate arguments for patentability for Groups I-XIII are provided, *infra*.

VIII. ARGUMENT

A. *Claims 1-29 (GROUPS I-XIII) are Patentable over Cassorla and APA*

The Action alleges that *Cassorla* describes every feature of Applicants' independent claim 1, except for the step of, "displaying a page of the electronic document on a computer display device using a document browser that permits a user to move forward and backward among a plurality of document pages." (Action – pages 3 and 4). To overcome the deficiencies of *Cassorla*, the Action relies on page 1, lines 17-22 of *APA*.

The cited portion of *APA* describes typical functions of web browsers. Even assuming, but not admitting, that the cited portion of *APA* describes the displaying step of Applicants' claim 1, and even further assuming, but not admitting, that *Cassorla* describes the other features of Applicants' claim 1 as alleged by the Action, the combination of *Cassorla* and *APA* is improper.

Cassorla is a "method for associating annotation with electronically published material." (Title). *Cassorla* associates annotations to particular areas within a formatted text stream. *Cassorla* requires that the text of a document be "formatted" into an overall organization for headings and ordered paragraphs. (See Col. 6, lines 42-50). As shown in Figures 1 and 2 of *Cassorla* in particular, neither the formatted text stream 25, nor displayed image 25' is an actual page of the electronic document. "The formatted text stream 25 illustrated in FIG. 2 has structured document tags similar to those referenced above." (Col. 6, lines 14-16). The formatted text stream 25 of *Cassorla* is an electronic document that has been configured with tags to associate a coordinate system of annotations to the formatted text stream 25.

Cassorla cannot be properly combined with the cited portion of *APA* as *Cassorla* requires a formatted text stream 25 in order to operate. *Cassorla* must establish a structure relationship between the original text, the formatted text stream 25, and the associated annotation strings 24. Only after the structure of the formatted text stream 25 is established with an overall organization for headings and ordered paragraphs can annotations be associated with a particular paragraph in accordance with the invention of *Cassorla*. (Col. 6, lines 10-50). Further, *Cassorla* is an entirely

text-based system. Under *Cassorla*, to highlight a portion of text, a user must identify two precise points to “bracket” the content to be highlighted. (Col. 4, lines 39-42). With *Cassorla*, a user cannot enter a freehand stroke. All entries are text-based entries with predefined characteristics. A user can choose a color or type style, but she cannot underline content so that the line is not straight, or passes through content on the display. Under Appellants’ system, as clearly shown in Figures 6 and 7, a user can input strokes that are not text-based, but graphics-based, i.e., based on pixel-blending.

Still further, the non-final Office Action of March 24, 2003, and the Final Office Action of September 16, 2003, provide two different and unsupported reasons for combining *Cassorla* and *APA*. Neither reason establishes a proper motivation to combine *Cassorla* and *APA*. As such, there is no motivation to combine because it is not plausible to convert the rigid character-based system of *Cassorla* to a graphics-based document browser that permits freehand strokes to be inputted. Therefore, the motivation to combine *Cassorla* and *APA* is improper.

B. *Claims 2, 11 and 17 (GROUP II) are Patentable Over Cassorla and APA*

Dependent claim 2 recites, *inter alia*, “using opaque markings that obscure portions of the currently displayed document page”, dependent claim 11 recites, *inter alia*, “wherein the computer software displays and stores opaque annotations that obscure annotated portions of the currently displayed document page,” and dependent claim 17 recites, *inter alia*, “instructions for creating an opaque annotation that obscures annotated portions of the currently displayed document.” The Action cites Figure 1 of *Cassorla* as teaching these features. Figure 1 of

Cassorla shows a display 26 with an image of a formatted text stream 25' and images of annotation strings 24'. Images of annotation strings 24' are merely text-based keyboard 50 entered annotations that are associated with particular paragraphs, subparagraphs, etc. of the image of the formatted text stream 25'. Even assuming a proper motivation to combine, neither this portion, nor any other portion of *Cassorla*, either alone or in combination with *APA*, teach or suggest, "using opaque markings that obscure portions of the currently displayed document page," as recited, among other features, in Appellants' claim 2, "wherein the computer software displays and stores opaque annotations that obscure annotated portions of the currently displayed document page," as recited, among other features, in Appellants' claim 11, and "instructions for creating an opaque annotation that obscures annotated portions of the currently displayed document," as recited, among other features, in Appellants' claim 17.

C. *Claims 3 and 12 (GROUP III) are Patentable Over Cassorla and APA*

Dependent claim 3 recites, *inter alia*, "wherein step (3) comprises the step of using a translucent highlighting that does not completely obscure the annotated portions of the currently displayed document page," and dependent claim 12 recites, *inter alia*, "wherein the computer software displays and stores translucent highlight annotations that do not completely obscure annotated portions of the currently displayed document page." The Action cites column 6, lines 51-68 of *Cassorla* as teaching these features. The cited portion describes annotation string records 24'. Indeed, the cited portion describes a highlighting annotation type indicator, but fails to describe anything as to translucent highlighting that does not completely obscure annotated

portions of a displayed document page. Neither this portion, nor any other portion of *Cassorla*, either alone or in combination with *APA* teaches or suggests, “wherein step (3) comprises the step of using a translucent highlighting that does not completely obscure the annotated portions of the currently displayed document page,” as recited, among other features, in Appellants’ claim 3, and “wherein the computer software displays and stores translucent highlight annotations that do not completely obscure annotated portions of the currently displayed document page,” as recited, among other features, in Appellants’ claim 12.

D. *Claims 4 and 18 (GROUP IV) are Patentable Over Cassorla and APA*

Dependent claim 4 recites, *inter alia*, “blending pixels from the currently displayed document with a translucent color to produce a translucent annotation,” and dependent claim 18 recites, *inter alia*, “wherein the translucent annotation is generated by blending pixels from the currently displayed document with a highlighting pixel color.” The Action cites column 4, lines 4-43 of *Cassorla* as teaching these features. The cited portion describes placemarks, bookmarks, highlighting, and margin flags. Indeed, the cited portion describes highlighting context and identifying a color or type style, but fails to describe anything as to pixel blending. Neither this portion, nor any other portion of *Cassorla*, either alone or in combination with Appellants’ written description teaches or suggests, “blending pixels from the currently displayed document with a translucent color to produce a translucent annotation,” as recited, among other features, in Appellants’ claim 4, and “wherein the translucent annotation is generated by blending pixels

from the currently displayed document with a highlighting pixel color,” as recited, among other features, in Appellants’ claim 18.

E. *Claims 5, 13, and 19 (GROUP V) are Patentable Over Cassorla and APA*

Dependent claim 5 recites, *inter alia*, “using an erase highlighting that erases previously annotated areas of the currently displayed document page,” dependent claim 13 recites, *inter alia*, “wherein the computer software displays and stores erased annotations that remove previously made annotations on the currently displayed document page,” and dependent claim 19 recites, *inter alia*, “instructions for erasing portions of previously created annotations.” The Action cites Figure 1 of *Cassorla* as disclosing, “instructions for erasing portions of previously created annotations” to reject Appellants’ claims 5 and 19. The Action cites Figure 3 of *Cassorla* as disclosing, “computer software [that] displays and stores erased annotations that remove previously made annotations on the currently displayed document page” to reject Appellants’ claim 13. At best, *Cassorla* allows for the revision or deletion of previously created annotations 28. (Col. 9, lines 57-58). However, because the system in *Cassorla* is text-based, a user cannot use an erase highlighting to erase portions of annotations such as the entry shown in Appellants’ Figure 7. Clearly, the text-based system of *Cassorla* fails to teach or suggest these features of Appellants’ claims 5, 13, and 19.

F. *Claim 7 (GROUP VI) is Patentable over Cassorla and APA*

Dependent claim 7 calls for, *inter alia*, “wherein step (3) comprises the step of storing a separate stroke for each annotation, wherein each stroke corresponds to a continuous set of

movement when the user input device is activated.” The Final Office Action cites column 2, lines 17-44 of *Cassorla* as describing this feature of Appellants’ claim 7. Specifically, the Action states,

The record of such annotations or “place marks” can be stored within or separately from the published material. Annotations stored separately from the originally published document are associated by name with the document and can either be accessed by a particular individual reader and/or shared and exchanged between individuals with access to the same ‘or copies of the’ published electronic document for a variety of purposes. (Final Office Action, page 6).

Neither the cited portion of *Cassorla*, nor any other portions, teaches, suggests, describes or even makes reference to strokes and/or a continuous set of movement. Figure 1 of *Cassorla* shows a display 26 with an image of a formatted text stream 25’ and images of annotation strings 24’. Images of annotation strings 24’ are merely text-based keyboard 50 entered annotations that are associated with particular paragraphs, subparagraphs, etc. of the image of the formatted text stream 25’. *Cassorla* is an entirely text-based system. With *Cassorla*, a user cannot enter a freehand stroke. All entries are text-based entries with predefined characteristics. A user can choose a color or type style, but she cannot annotate using strokes corresponding to a continuous set of movement. As shown in Figures 2 and 3 of *Cassorla*, text is formatted into a text stream and annotations are displayed adjacent to a paragraph of the formatted text. Under Appellants’ system, as clearly shown in Figures 6 and 7, a user can input strokes that are not text-based, but graphics-based, i.e., strokes corresponding to a continuous set of movement.

The combination of *Cassorla* and *APA* fails to teach, suggest, or describe a “stroke” for storage of an annotation. At best, *Cassorla* allows a user to associate a text-based annotation

“adjacent to”, “next to”, or “proximate to” a formatted paragraph; however, *Cassorla* fails to teach or suggest, “wherein step (3) comprises the step of storing a separate stroke for each annotation, wherein each stroke corresponds to a continuous set of movement when the user input device is activated,” as recited, among other features, in Appellants’ claim 7.

G. *Claims 8 and 20 (GROUP VII) are Patentable Over Cassorla and APA*

Dependent claim 8 recites, *inter alia*, “displaying the retrieved annotations on the computer display device superimposed over the different document page,” and dependent claim 20 recites, *inter alia*, “displaying the annotations retrieved in step (4) on the different document page.” To show the claim 8 feature of displaying the retrieved annotations on the computer display device superimposed over the different document page, the Action relies on Figure 3 and column 6, lines 51-68 of *Cassorla*. Neither the cited portion of *Cassorla*, nor any other portion, teach, describe, suggest, or make reference to superimposing retrieved annotations over a different document page. At best, *Cassorla* is an entirely text-based system that allows a user to associate a text-based annotation “adjacent to”, “next to”, or “proximate to” a formatted paragraph. Every figure of *Cassorla* and its corresponding description teach annotations that are physically located beside portions of an electronic document. However, *Cassorla* fails to teach or suggest in any figure or corresponding description that retrieved annotations are superimposed over a document page. As such, Appellants submit that the combination of *Cassorla* and *APA* fails to teach or suggest every feature of Appellants’ claims 8 and 20.

H. ***Claims 9 and 15 (GROUP VIII) are Patentable Over Cassorla and APA***

Dependent claim 9 recites, *inter alia*, “wherein step (6) comprises the step of detecting a title change event in the document browser and, in response thereto, locating an annotation file corresponding to the different document page.” The Action cites Figure 4 of *Cassorla* as teaching this feature of Appellants’ claim 9. Dependent claim 15 recites, *inter alia*, “wherein the computer software retrieves, upon detecting a title change event, previously stored annotations associated with a different document page and displays the previously stored annotations on the different document page.” The Action cites Figure 3 and column 6, lines 51-68 of *Cassorla* as teaching this feature of Appellants’ claim 15. Figure 4 of *Cassorla* is described as illustrating the display of book text with associated annotations (col. 2, lines 67-68). Figure 4 of *Cassorla* is similar to Figure 1 of *Cassorla* which shows a display 26 with an image of a formatted text stream 25’ and images of annotation strings 24’. Images of annotation strings 24’ are merely text-based keyboard 50 entered annotations that are associated with particular paragraphs, subparagraphs, etc. of the image of the formatted text stream 25’. Even assuming a proper motivation to combine, neither this portion, nor any other portion of *Cassorla*, either alone or in combination with *APA*, teach or suggest, “wherein step (6) comprises the step of detecting a title change event in the document browser and, in response thereto, locating an annotation file corresponding to the different document page,” as recited, among other features, in Appellants’ claim 9. Further, Figure 3 and column 6, lines 51-68 of *Cassorla* describe annotation string records 24’. The cited portion describes an item count for the number of annotations associated

with a particular paragraph, a type indicator, a user file to indicate which user has entered a particular annotation, and the actual character string of the annotation. This portion of *Cassorla* fails to describe anything as to detection of title change events, location of an annotation file corresponding to a different page, and/or display of previously stored annotation on the different document page. As such, *Cassorla*, either alone or in combination with *APA*, fails to teach or suggest every feature of Appellants' claims 9 and 15.

I. ***Claims 21, 25, and 27 (GROUP IX) are Patentable Over Cassorla and APA***

Dependent claims 21, 25, and 27 each recite, *inter alia*, "wherein annotations are stored in a data structure as strokes." Support for storage of annotations in a data structure as strokes can be found, among other places, on page 8, lines 27-30 of Appellants' original *Specification*. The Action relies on column 2, lines 17-44 of *Cassorla* as teaching this feature of claims 21, 25, and 27. The cited portion of *Cassorla* summarizes the invention. In particular, the cited portion describes how the *Cassorla* system associates annotations with particular context within the document to a hierarchical structure by "marking up" the material and identifying major document elements such as chapters, sections, sub-sections, paragraphs, figures, etc. (Col. 2, lines 35-41). Only after the structure of formatted text is established with an overall organization for headings and ordered paragraphs can annotations be associated with portions of text. (Col. 6, lines 42-46). Neither the cited portion nor any other portion of *Cassorla* teaches, describes, suggests, or even makes reference to strokes. As such, the combination of *Cassorla* and *APA* at least fails to teach or suggest, "wherein annotations are stored in a data structure as strokes."

J. ***Claim 22 (GROUP X) is Patentable Over Cassorla and APA***

Dependent claim 22 recites, *inter alia*, “wherein each stroke includes a stroke width and coordinates indicating a trajectory of the stroke.” The Action relies on column 9, line 54 to column 10, line 12 of *Cassorla* as teaching this feature of claim 22. The cited portion of *Cassorla* describes adding, editing, and deleting annotations, printing annotations near their respective paragraph images, and transferring annotations to other workstations or a host computer. Neither the cited portion of *Cassorla*, nor any other portion, teaches, suggests, describes, or even makes reference to stroke width and/or stroke trajectory. As stated above with reference to Appellants’ claim 1, *Cassorla* is an entirely text-based system. With *Cassorla*, a user cannot enter a freehand stroke. All entries are text-based entries with predefined characteristics. A user can choose a color or type style, but she cannot annotate using a stroke having a stroke width and trajectory. As such, the combination of *Cassorla* and *APA* at least fails to teach or suggest, “wherein each stroke includes a stroke width and coordinates indicating a trajectory of the stroke.”

K. ***Claims 23, 26, and 28 (GROUP XI) are Patentable Over Cassorla and APA***

Dependent claims 23, 26, and 28 each recite, *inter alia*, “wherein annotations are stored as a bitmap image.” The Action relies on column 4, lines 4-42 of *Cassorla* as teaching this feature of claims 23, 26, and 28. The cited portion describes placemarks, bookmarks, highlighting, and margin flags. In particular, the cited portion states that, for these types of annotations, two precise points are typically required to be identified to “bracket” the context to

be highlighted and a particular style to be recorded. (Col. 4, lines 39-42). *Cassorla* requires a rigid hierarchical structure in place in order to associate annotations with particular points within a preformatted text stream. (See Figures 2 and 3). Neither the cited portion nor any other portion of *Cassorla* teaches, describes, suggests, or even makes reference to bitmap images. As such, the combination of *Cassorla* and *APA* at least fails to teach or suggest, “wherein annotations are stored as a bitmap image.”

L. ***Claim 24 (GROUP XII) is Patentable Over Cassorla and APA***

Dependent claim 24 recites, *inter alia*, “further comprising an annotation mode selection menu.” The Action relies on Figure 2 of *Cassorla* as teaching this feature of claim 24. Figure 2 of *Cassorla* is a more detailed diagram of the memory image for the formatted text stream 25, showing in particular the paragraph coordinates 56 associated with each particular paragraph and heading in the formatted text stream 25. Figure 2 fails to show a menu for anything. The formatted text stream 25 of Figure 2 is a coordinated breakdown of the rigid hierarchical structure that the *Cassorla* system uses to define document text by chapters, headings, sections, sub-sections, paragraphs, figures, etc. Indeed, the cited portion of *Cassorla*, nor any other portion, teaches, suggests, describes, or even makes reference to an annotation mode selection menu. As such, the combination of *Cassorla* and *APA* at least fails to teach or suggest, “further comprising an annotation mode selection menu.”

M. ***Claim 29 (GROUP XIII) is Patentable Over Cassorla and APA***

Independent claim 29 calls for, *inter alia*, “receiving a signal representing a selected annotation mode from an annotation selection menu.” The Action fails to cite any portion of *Cassorla* or *APA* to teach this feature. Support for Appellants annotation mode selection menu can be found in Appellants’ Figure 4 and its corresponding description in the *Specification*. Neither a figure nor the written description of *Cassorla* teaches or suggest s an annotation mode selection menu for selection of an annotation mode. As such, the combination of *Cassorla* and *APA* at least fails to teach or suggest, “receiving a signal representing a selected annotation mode from an annotation selection menu.”

Independent claim 29 calls for, *inter alia*, “determining a width and trajectory of the annotation.” For at least the same reasons as stated above with reference to Appellants’ dependent claim 2, the combination of *Cassorla* and *APA* fails to teach or suggest this feature of claim 29.

Independent claim 29 further calls for, *inter alia*, “storing the annotation as a stroke in a data structure separate from the electronic document.” For substantially the same reasons as stated above with reference to Appellants’ dependent claims 21, 25, and 27, the combination of *Cassorla* and *APA* fails to teach or suggest this feature of claim 29.

Independent claim 29 also calls for, *inter alia*, “displaying the annotation in an ink layer that is superimposed over and blended with pixels on the document page.” To show the claim 29 feature of displaying the annotation in an ink layer that is superimposed over and blended with

pixels on the document page, the Action relies on column 4, lines 4-42 of *Cassorla*. Neither the cited portion of *Cassorla*, nor any other portion, teach, describe, suggest, or make reference to superimposing an ink layer over a document page and/or pixel blending with a document page. At best, *Cassorla* is an entirely text-based system that allows a user to associate a text-based annotation “adjacent to”, “next to”, or “proximate to” a formatted paragraph. Every figure of *Cassorla* and its corresponding description teach annotations that are physically located beside portions of an electronic document. *Cassorla* fails to teach or suggest in any figure or corresponding description that an ink layer is superimposed over and blended with pixels on an electronic document page. As such, the combination of *Cassorla* and *APA* at least fails to teach or suggest, “displaying the annotation in an ink layer that is superimposed over and blended with pixels on the document page.”

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IX. CONCLUSION

For all of the foregoing reasons, Appellants respectfully submit that the final rejection of claims 1-29 is improper and should be reversed.

Respectfully submitted,

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APPENDIX

CLAIMS INVOLVED IN THE APPEAL

1. A computer-implemented method of annotating pages of an electronic document independently of the contents of the document, comprising the steps of:

(1) displaying a page of the electronic document on a computer display device using a document browser that permits a user to move forward and backward among a plurality of document pages;

(2) selecting an annotation mode that permits the user to annotate the currently displayed document page;

(3) annotating parts of the currently displayed page by moving a user input device to indicate where on the currently displayed document page the annotations should appear; and

(4) storing annotations made in step (3) separate from the electronic document.

2. The computer-implemented method of claim 1, wherein step (3) comprises the step of using opaque markings that obscure portions of the currently displayed document page.

3. The computer-implemented method of claim 1, wherein step (3) comprises the step of using a translucent highlighting that does not completely obscure the annotated portions of the currently displayed document page.

4. The computer-implemented method of claim 3, wherein step (3) comprises the step of blending pixels from the currently displayed document with a translucent color to produce a translucent annotation.

5. The computer-implemented method of claim 1, wherein step (3) comprises the step of using an erase highlighting that erases previously annotated areas of the currently displayed document page.

6. The computer-implemented method of claim 1, wherein step (3) comprises the step of using a stylus with a tablet computer system.

7. The computer-implemented method of claim 1, wherein step (3) comprises the step of storing a separate stroke for each annotation, wherein each stroke corresponds to a continuous set of movement when the user input device is activated.

8. The computer-implemented method of claim 1, further comprising the steps of:
(5) moving to a different document page;
(6) retrieving previously stored annotations associated with the different document page;
and

(7) displaying the retrieved annotations on the computer display device superimposed over the different document page.

9. The computer-implemented method of claim 8, wherein step (6) comprises the step of detecting a title change event in the document browser and, in response thereto, locating an annotation file corresponding to the different document page.

10. A system for annotating electronic documents independently of the content of the documents comprising:
a computer display device;

a computer programmed with a document browser that permits a user to display an electronic document on the computer display device and to move forward and backward among a plurality of document pages;

a computer input device that permits the user to indicate portions of a currently displayed document page; and

computer software that permits the user to annotate parts of the currently displayed document page according to indicated portions of the currently displayed document, wherein the computer software displays the annotated parts of the currently displayed document page on the computer display device and stores annotations made by the user separate from the currently displayed document page.

11. The system of claim 10, wherein the computer software displays and stores opaque annotations that obscure annotated portions of the currently displayed document page.

12. The system of claim 10, wherein the computer software displays and stores translucent highlight annotations that do not completely obscure annotated portions of the currently displayed document page.

13. The system of claim 10, wherein the computer software displays and stores erased annotations that remove previously made annotations on the currently displayed document page.

14. The system of claim 10, wherein the computer display device comprises a flat panel display, and wherein the computer input device comprises a stylus.

15. The system of claim 10, wherein the computer software retrieves, upon detecting a title change event, previously stored annotations associated with a different document page and displays the previously stored annotations on the different document page.

16. A computer-readable storage medium comprising computer-executable instructions for performing steps comprising:

(1) displaying an electronic document page on a computer display device and permitting a user to move forward and backward among a plurality of document pages;

(2) annotating parts of a currently displayed page in accordance with movement of a user input device to indicate where on the currently displayed document page the annotations should appear; and

(3) storing annotations made in step (2) separate from the electronic document.

17. The computer-readable storage medium of claim 16, wherein the computer-executable instructions for step (2) further comprise instructions for creating an opaque annotation that obscures annotated portions of the currently displayed document.

18. The computer-readable storage medium of claim 16, wherein the computer-executable instructions for step (2) further comprise instructions for creating a translucent annotation that does not completely obscure annotated portions of the currently displayed document, wherein the translucent annotation is generated by blending pixels from the currently displayed document with a highlighting pixel color.

19. The computer-readable storage medium of claim 16, wherein the computer-executable instructions for step (2) further comprise instructions for erasing portions of previously created annotations.

20. The computer-readable storage medium of claim 16, wherein the computer-readable instructions further include steps for:

(4) in response to detecting that the user has moved to a different document page, retrieving previously stored annotations associated with the different document page; and
(5) displaying the annotations retrieved in step (4) on the different document page.

21. The computer-implemented method of claim 1, wherein annotations are stored in a data structure as strokes.

22. The computer-implemented method of claim 21, wherein each stroke includes a stroke width and coordinates indicating a trajectory of the stroke.

23. The computer-implemented method of claim 1, wherein annotations are stored as a bitmap image.

24. The system of claim 10, further comprising an annotation mode selection menu.

25. The system of claim 10, wherein annotations are stored in a data structure as strokes.

26. The system of claim 10, wherein annotations are stored as a bitmap image.

27. The computer-readable storage medium of claim 16, wherein annotations are stored in a data structure as strokes.

28. The computer-readable storage medium of claim 16, wherein annotations are stored as a bitmap image.

29. A computer-implemented method of annotating pages of an electronic document independently of the contents of the document, comprising the steps of:

- (1) displaying a page of the electronic document on a computer display device using a document browser that permits a user to move forward and backward among a plurality of document pages;
- (2) receiving a signal representing a selected annotation mode from an annotation selection menu;
- (3) receiving a signal representing an annotation of the currently displayed page;
- (4) determining an initial position of the annotation;
- (5) determining a width and trajectory of the annotation;
- (6) receiving a signal representing that the annotation is complete;
- (7) storing the annotation as a stroke in a data structure separate from the electronic document; and
- (8) displaying the annotation in an ink layer that is superimposed over and blended with pixels on the document page.